

## CLAIMS

What is claimed is:

1. A diversity handover branch control method in a mobile communication system including a mobile station, a plurality of base stations and a switching center connected to said plurality of base stations, said method comprising the steps of:

monitoring radio conditions between said mobile station and said plurality of base stations;

detecting addition branch candidates from not communicating branches when differences between said monitored radio condition of communicating branch and of said not communicating branches are smaller than an addition DHO threshold value, and detecting deletion branches candidates from the communicating branches when differences between said monitored best radio condition and the other radio condition in said communicating branches are larger than a deletion DHO threshold value; and

notifying said switching center of information on said detected deletion branches, or information on said detected addition branch candidates along with their precedence;

wherein said addition DHO threshold value is different from said deletion DHO threshold value.

2. The diversity handover control method as claimed in claim 1, wherein said detecting step detects addition branch candidates based on the best radio condition in said communication branches and the addition DHO threshold value, when said mobile station is communicating with base stations via a plurality of communicating branches.

3. The diversity handover control method as claimed in claim 1, wherein said notifying step notifies said switching center of information on all communicating branches and said detected addition branch candidates when said deletion branches are detected.

4. The diversity handover control method as claimed in claim 1, wherein said notifying step notifies said switching center of information on all said detected addition branch candidates and all communicating branches when a communicating radio branch number is not equal to a simultaneously establishable maximum radio branch number.

5. The diversity handover control method as claimed in claim 1, wherein said notifying step notifies said switching center of information on addition branch candidates having the radio condition exceeding the worst radio condition of communicating branches by the threshold value.